

Aviation News

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Back In Government: Clarence M. Young (left), who joined the Commerce Department in 1926 to draft the first air commerce regulations and stayed on seven years, takes the oath of office as a CAB member from L. Welch Pogue, CAB chairman, in Pogue's office. Young fills the unexpired term of Dr. Edward P. Warner. (Story on Page 38)

Operators Worried As Ex-GI's Rush To Flight Schools

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Airline Shares Are Mauled In Recent Selling Wave

Paper profits based solely on potential earnings begin to evaporate.....Page 26

U. S. Participation In IATA Conferences OK'd By CAB

Sanction applies only to machinery of plan; all agreements need Board approval.....Page 30



"FLYING JACKET LIKE CAPT. SANSON'S?"

The girl student stopped it to ask Sam if he knew where she could get a leather jacket like her instructor's. Sam said he didn't, suggested that she try the Army & Navy store in town. The girl thanked him and went out.... Ole, who is Sam's wealthy silent all-around man, spoke up.

"That's the fifth time this week I've heard you brush off students who want flying gear. There's a new gang starting every Saturday, most of them are in the market for clothes of some kind. Why wouldn't it be smart for us to get some flying suits and stuff from Air Associates, and let me make the sales instead of turning them away?"

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AIR FORCE AUTONOMY—Autonomy for the Air Force seems asserted in the plan to divide the postwar Army into two combat arms—ground and air forces—which now is under study. The Army already is going ahead with the program although Congress has not yet reached either the question of withdrawal of the armed forces or of universal military training.

BERMUDA AIR PACT—Proposals with which President Truman endorsed the Anglo-American air transport agreement as "a very important forward step," is expected to encounter more opposition to the pact which was developed in Capitol Hill. These are indications that the agreement may be tapered into the proposed \$1,400,000,000 loan to Great Britain when that plan comes before Congress. While effect that would have a still a matter of structure.

P-40s FOR OCCUPATIONAL UNITS—Contracted production and possession of jet aircraft is emphasized in the plan of the AAF to re-equip some of its units on occupational duty in Europe and in the Pacific with pre-proposed Lockheed P-80 Shooting Stars. Approximately 150 of the planes will be assigned to units in Europe with the first 75 planes expected to reach Germany next month and the rest later in the summer. The 14th Air Force, pending the Pacific loan later in the Philippines will receive 75 of the fighters in April and 75 more will be sent to the 5th Air Force in Japan this summer. Inactivation will accompany the first shipment of the new planes to both theaters.

THUNDERBOLTS—Congress, which is investigating almost everything else these days now has been asked to investigate the causes and characteristics of thunderbolts. A resolution providing for the inquiry was introduced by Rep. Babinchick (D., N. C.) who has survived an accident due to thunderbolts and request the investigation as a means of promoting safety of aircraft operation.

AIRLINE PAY—The Air Line Pilot's Association has been defeated in its refusal to negotiate with the

outlets wage committee on long-delayed pilot pay. The National Medicine Board negotiates with representatives of individual operators in a face saving gesture for David L. Bachman, ALPA president. NMBA's decision to recognize powers of attorney granted to the committee by 45 airlines was strongly supported by CAA's approval of the strikes agreement by which the committee was created.

WHOSE SECRET?—When the Aircraft Industries Association's public relations advisory committee met in New York last week, as the agenda was the matter of AAF's concern over "leak" regarding recent experimental success. AAF complains that on even negative Air Force opinions under a directive forbidding mention of experimental types, while "Aviation News" and other publications have been printing such information. Not mentioned by AAF was the fact that Air Force "leak" details of the B-36 bomber and many other "secret" developments.

AIRPORT LEGISLATION—Rep. Percy Price (D., Tenn.) told "Aviation News" last week that he plans to attempt to amend pending airport legislation out of conference with one recent speech on the House floor demanding that conference report back a compromise version of the House-approved air airport bill and the Senate-approved McGowan bill. The method of channeling funds continues to block conference agreement, with the states' rights faction refusing to compromise in their position for liquidating all airport funds through state governments and having cities from dealing directly with the federal government.



SURPLUS CHIEFS:

Le Gen Edward B. Gregory (left) now heads all surplus disposal activities as chairman of the board of directors of the War Assets Corp., which handles the liquidation of the former Surplus Property Administration and the disposal services of the Reconstruction Finance Corp. WAC will become an independent agency under the name War Assets Administration on March 25. Brig Gen James A. Madden (right) is vice-president of WAC in charge of aircraft and airport disposal, succeeding Lt. Col. Frank J. Murphy who was chief of aircraft disposal for RFC.

EXPORT REGULATIONS—CAA is studying revision of surplus export regulations which would allow aircraft manufactured under a valid type certificate and under CAA-accepted factory conditions to be craned for shipment abroad without first being assembled and air-fitted. If forced to have the industry's backing, revision would cut export costs considerably. Aviation officials in the country of destination would have to approve the plan.

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March 4, 1946

Many Operators Express Concern As Ex-GI's Rush to Flying Schools

Wonder whether aviation industry can expand quickly enough to absorb all who seek air careers; fear sudden boom in improperly-organized and low-standard outfits.

By WILLIAM KROGER

While the rush by war veterans to get aviation training promises an unprecedented volume of business, many well-established school operators—and to a certain extent, some Veterans Administration officials—view the whirlwind with a degree of concern.

Workings of the amended GI Bill of Rights as it applies to aviation training still have not been explained to the majority of schools. But nevertheless VA headquarters in Washington is swamped with inquiries, and several of the larger schools report a flood of applicants.

► **One Has 1,000 Applicants**—At one, there are 1,000 applications for flight training, and the mechanics courses are full. At another, the ground school is filled. At still another, flight and mechanics schools both are filled. A northern operator declares he can fill his school any time he wishes, but is deliberately proceeding slowly.

► **You People Cause Worry**—Worry of the operators centers on two points: 1) whether the aviation industry will develop fast enough and be large enough to absorb all the veterans who desire training to fit them for aviation, 2) whether requirements for approval of a school are so loose as to threaten a lowering of training standards.

On the first point, VA has a "hands-off" attitude. The act allows a veteran to apply for any type of education he wishes. Accordingly, operators are being urged to "sell" primary flight training leading to a private pilot's license, rather than longer and more experienced flight courses.

► **Can Be Little**—VA says the operator's worry on the second point, but can do little. It will pay for education only to an institution approved by a state. While VA would

like schools giving aviation training to be those approved by CAA, it cannot specify that because of the danger of getting into a "state's rights" fight.

A few states will approve an aviation school only if it conforms to CAA standards. But approval by the majority is denied by the department of education, which usually lacks sufficient aeronautical background. Some other states rely on the aeronautics commissions for recommendations.

► **Fly-By-Night Schools Feared**—The danger inherent in the present set-up, as operators see it, is that it will be politically impossible for

550 Schools Approved

As of Feb. 1 there were a total of 558 CAA-approved aviation schools in the country. Of these, 332 are approved for primary instruction and 17 for advanced instruction only. The remaining 214 schools are approved for both primary and advanced training.

CAA approval standards are such that the establishment of a school that can be approved requires a considerable capital investment.

the states to refuse an approval request of almost anyone who wants to "help veterans." The desired result is a pool of qualified operators who "it must of these colleges it is felt it would bring the entire aviation training business under public criticism.

Despite their worries over the program, school officials are working step-by-step to familiarize themselves with VA policy and procedure. The Aeronautical Training



RECORD REFUELING:

Outstanding but little publicized is the record record flight of three Lockheed P-38's across the United States was the amazing refueling time in two of the planes at Topeka, Kan.—1 min. 34 sec. for the ship flown by Capt. John S. Bobel, 2 min. 55 sec. for that of Capt. Martin L. Smith (above). Seven minutes had been the estimated refueling time for a specially trained crew of 17 fuel handlers and technicians. The record-setting refueling, in which 600 gals. of kerosene were pumped into each plane through high-pressure filters, while their turbine engines idled at 4,000 rpm, indicates a new potential in maintaining fighter protection above a given target on a continuous basis during periods of alert.

Geisse Urges Folding Wings Be Incorporated in New Planes

Cites savings to owner through decreased hangage costs; Wack doubts public demand, believes fixed-wing design will continue to be followed by manufacturers.

By ALEXANDER McGRUBLEY

Does the American private pilot want his personal plane to have folding wings? What advantages will be gained from it? Would he hold his plane's wings if he had such an arrangement?

These questions are provided by a recent statement by John R. Geisse, assistant to the Civil Aeronautics Administrator in charge of Personal Flying Development, urging personal aircraft manufacturers to study the possibilities of incorporating a wing-folding arrangement into their new plane designs.

Cuts Storage Charges—He sees a sizable storage charge on the present airplanes, by cutting down the amount of hangar space required for each individual plane.

The saving might amount to \$100 or more a year to the plane owner, he anticipates, and would probably pay for the additional cost of folding wings within the first year of ownership. If a plane lasted a normal 10 years, the total saving might amount to \$1,000 to \$1,500.

Wack Cites Lack of Interest—

Asked for an industry viewpoint on the question of folding-wing personal planes, Fred Wack, vice-president in charge of engineering at the Engineering & Research Corp., Haverhill, Mass., points out that there were several airplanes with folding wings in pre-war days, but that the folding-wing feature was largely discontinued because of lack of pilot interest. Among the planes he cited the P-40 and the P-51 Mustang.

Would Have To Be Simple—Planes who had planes with folding wings wouldn't bother to fold them, unless the operation could be made one of push-button simplicity, Wack believes. Such an operation would require electric or hydraulic actuation, costing considerably more than the manually operated folding operation which Geisse estimates would cost from \$100 to \$250.

Sees No Early Change—If the hangar shortage problem isn't solved, the flying public eventually may demand the folding wing, but until the number of personal aircraft gets

much larger than it is today, Wack expects the majority of personal planes will continue with fixed wings and that there will be sparse private airports and airports to house them.

Will Be Studied On "Sealer"—Only one post-war personal plane that has incorporated the retractable 4-place Stearman amphibian, is expected to have this feature in its production model in order to make it possible to house the Stearman in an ordinary hangar, Alfred H. Hatcher, Bendix Aviation president, disclosed recently.

However it is quite possible that other personal plane manufacturers might agree to offer folding wings as an optional feature at an extra cost high enough to cover the additional manufacturing expense. They probably will not be done, however, unless a considerable demand for the folding wings feature is evidenced by the consumer.

Hangar Capacities Compared—Geisse illustrates the advantage of adding a folding-wing plane, with a comparison of two hangars of equivalent space. A 56-ft. hangar would hold only four fixed-wing airplanes in individual stalls. By folding the wings of those same planes the identical accommodations would be large enough to house 16 planes in the same amount of hangar space and still provide individual stalls.

He focuses the biggest advantage for folding-wing planes in small downtown airports where storage of planes will be limited. They allow 16 planes of conventional design could be bargained to an acre of ground, with sufficient room for taxiing during busy periods, but the same acre could accommodate 16 to 32 folding-wing planes.

Wack Sees Increase—A reality support costing \$2,000 per acre, represents an interest rate of about \$400 per acre annually. If the overall net income, derived from hangar, service and concessions, does not pay at least this amount, the operation is unprofitable. But if the operator can double his hangar capacity, by accommodating more folding-wing planes, the downtown airport would be a much more attractive investment.

Geisse notes that if British manufacturers have been folding the wings of their personal planes for years, and that the best proof of the safety of the folding wing is in Navy carrier-based aircraft which have millions of hours under rugged wartime conditions.

jealous when the wing folds actually is the strongest part of the wing. He suggests that a locking device with a key might ease the minds of any plane owners who feared the wings might fold in mid-air.

Other Advantages—Other advantages of the folding wing cited include:

- Easier tie-down in the open, with less damage liability from wind and hail, and easy coverage of the whole plane with a canvas tarpaulin.
- Possible lower insurance rates.
- Easier moving of plane on ground, with less chance of wing tip damage in hangars.
- Better towing with folded wings, and even towing plane on highway in an emergency with wings folded would be a simple process.

Simplified Regulations Urged at Ft. Worth

Demands for further simplification of Civil Air Regulations affecting the private flyer and his plane were voiced by the members of the Des Moines, chairman of the CAA Advisory Committee for Non-scheduled Flying, and other speakers at a Ft. Worth, Texas, meeting of private flyers and non-scheduled operators last week.

Dorham appealed particularly for simplification of regulations concerning repair of airplanes. He told the meeting that one of the biggest problems facing the private flyer would be among farmers and ranchmen. These men, he said, are going to make their own minor repairs on their airplanes regardless of CAA regulations, just as they do on other farm machinery, and regulations should be modified in recognition of this fact.

McGill Forecasts Wide Use—Alfred Hatcher's spokesman for increased streamlining of private flying regulations, Gene McGill, of Alva, Oklahoma, president of the National Flying Private Association, predicted that within 15 years, 65 percent of the personal planes will be owned by farmers.

"On the farm and ranch is one place where a small plane will definitely pay for itself in quick order, in addition to serving as a pleasure craft," McGill said.

"Within ten, or at any time 15 years, there will be no such thing as an isolated farmer or rancher, because he will have his personal plane for both business, emergency and pleasure hops," the military expansion of farmers-on-wings observed.

ERLING AIRPORT



KEEPING UP WITH THE TIMES:

Charles Knapp, 68-year-old student pilot, is congratulated by Gene Jacoby, Sterling, Ill., motorcar and dealer, after completing his first solo flight. Knapp, shown here in a new Aerotec Champion, required only a few more hours of instruction than younger pilots need, Jacoby reported.

Seen Business Aided—He added that while the plane will bring the farmer and rancher in closer contact with the city, it will also take the city to the farm as more business men, traders, cattle buyers and salesmen take to the air.

"Too many folks are trying to and down the possibilities of the plane for anybody except flyers living in the city," the Flying Farmer's club asserted.

The speech was sponsored by the fourth region of the Civil Aeronautics Administration, with the thought that operators and private flyers would "let their hair down" concerning improvements needed in aviation.

McGill Named to Head Oklahoma Aviation Ass'n

New officer of the Oklahoma Aviation Association, elected at a recent meeting in Oklahoma City, are Gene McGill, flying member of Alva, Oklahoma, Keith Kahl, vice-president and general manager of Central Airlines, Oklahoma City, executive secretary-treasurer, Curtis Webb Hays, private pilot, vice-president.

McGill also is president of the Flying Farmers of America.

Program Outlined—Program for association activity includes a state air tour in May or June, an April meeting at Ada, a state-wide aviation education campaign in the public schools, a drive to promote flying safety among pilots and operators, and a study of pending national legislation affecting aviation.

Oklahoma City to Aid CAA Training Center

Oklahoma City has agreed to build an administration building and two new hangars for CAA use at the new training center to be established by the Administration at Will Rogers Municipal Airport.

The reasonably-financed building, together with structures now used by the AAF which will be turned over to CAA, will make possible establishment of the center with little direct new expenditure of government funds.

Will House Three Units—The Oklahoma City Center will include:

- The Standardization Center, now at Muskogee, Texas, for training CAA inspectors as new aviation developments and maintaining a standardized procedure for inspections.
- A new General Aeronautics Institute, where CAA planes will be serviced. Need for such a bus has been increased by the recent assignment to CAA of a large number of war surplus planes.
- The Sigurd Swenson school, currently operated as the Stowell Training Center, at Ft. Worth, Texas. The school now has a staff of from 10 to 12 people and trains CAA signal dispatch personnel in classes of 18 to 20, in techniques of scheduling, maintaining and operating new signal equipment.

CAA Administrator T. D. Wright disclosed that eventually it is planned to renovate all CAA training facilities at the new location.



Folding Wing Hangars—How folding the wings of private planes would make it possible to store five airplanes in a 56-ft. square hangar instead of only four with rigid wings, is shown in the CAA drawing. Folding wings, long used on private aircraft in England, are being advocated as one answer to the hangar shortage problem in this country.

NACA May Assist In Lightplane Design

Increased emphasis on research to improve the personal type airplane is anticipated from the National Advisory Committee for Aeronautics in the near future.

Dr. Jerome C. Hunsaker, chairman of NACA, told Aviation News last week that the committee was discussing with CAA a plan to test various familiar types of lightplanes in the full-scale wind tunnel at Langley Field with a view to stressing up the planes accordingly to improved performance.

Has Heavy Schedule—He said that while the full-scale tunnel had a rather heavy schedule of larger aircraft, there seemed no reason why one of the lightplanes could not also be scheduled for tests.

As far as is known this would be the first time in many years that NACA testing facilities have been opened to prototype-type planes. Most of them have been designed with only small model wind tunnel tests, or without any tunnel tests at all.

Thanks NACA Of Some Plans—Dr. Hunsaker recently testified before the House Committee on Appropriations that NACA felt a responsibility for the private owner type of personal aircraft.

He added that builders have long

NACA Reads Data

The National Advisory Committee for Aeronautics has advised the Aircraft Industries Association that it is preparing summary reports on technical research results which are expected to be of mutual assistance to designers of personal airplanes.

It is believed that a considerable proportion of data already developed during war-time research on military aircraft will be directly applicable to improvement of design of personal planes as well.

aided in their battle "subject of course to modification, and it is a very grave question whether all of these craft are safe to be sold to the public, whether they have inherent vices that will prove such a disappointment that the industry will receive a bad back-lash."

Cite References—The chairman explained that he believed none of the lightplanes were underpowered and lacked sufficient rate and angle of climb for a margin of safety in small fields. To overcome that by adding power will increase the fuel cost and operating cost of the plane, he said, but improvement of the plane aerodynamically, possibly with use of some type of high lift device, would provide an additional margin of safety.

Details of Peacetime CAP Program Due

Announcement of plans for the peacetime operation of Civil Air Patrol as an "educational and service organization" was expected last week following a dinner to be given Friday evening by the 46 CAP wing commanders for President Truman in Washington. The President was expected to speak off-the-record.

The wing commanders had planned to meet in Washington March 4, but had advanced their meeting in order to fit in with the President's schedule.

Edict Of AAF Plan Outlined—Meanwhile, one state wing commander reported that the continuation of the CAP as a civilian group working with and under the AAF would mean an effect that the AAF hoped would be the best of all worlds. The wing commander, an AAF officer, and other service personnel assigned to cooperation work with CAP, from its general appreciation rather than from the CAP approval process, is designated as of March 31.

"Instead of maintaining separate offices we will possibly occupy small corners in the AAF's establishments," the wing commander, Lt. Col. E. B. Finckler, Baltimore, Md., said.

See Little Change In Program—The CAP is expected to continue along its present lines of state or organization with a semi-military activity program designed primarily to interest American youth in aviation "so that they will be trained for military use and that their services should arise," he added.

Ohio Presses Air Marking

Air marking of approximately 700 Ohio communities by the state highway department has been asked by the Ohio Post-war Civilian Committee in compliance with a state law requiring the markings. "The law provides that any community which fails to establish and maintain marks showing the name of the town and the direction and distance to the nearest airport is subject to a state assessment of \$50."

AT-6 Sales are Heavy

In the first few days that surplus North American AT-6 Texans inventory was on sale at the new low price of \$1,900 more than \$300 were sold. War Assets Corp. has announced. Less than 100 AT-6s remain in stock.

Two-Place Parasol-Type Lightplane Costing \$1,320 Offered By N.Y. Firm

Ross Sport Plane, believed to be lowest-priced personal plane in 65-hp. class, received approved type certificate in 1942 but has never been produced in quantity.

A pricing of \$1,200 announced for a two-place 65-hp. lightplane, the Ross Sport Plane, is believed to be the lowest yet announced for any two-place plane of equivalent horsepower.

The high-wing open cockpit tandem plane, which uses a 30-hp. personal-type wing, received an approved type certificate from CAA, Feb. 3, 1945, but never was produced in quantity. It was designed by Orin A. Ross, president and chief designer of the Ross Aircraft Corp., 430 Lexington Ave., New York. CAA records show that the plane, which bears NC11358, was first registered in Aug. 28, 1940, and that its manufacture was started in April 1940.

Production To Start Soon—Production is expected to start at "any time" at a plant in Colorado Springs, Colo., under supervision of Ross other officers are Mrs. Florence A. Ross, treasurer, and Arthur J. Staveland, sales manager. The prototype plane flew at Roosevelt Field, New York, undergoing minor repairs before returning flight demonstrations.

Details Of Design—The parasol wing is attached to the fuselage by external struts. Pyramen is made for a cockpit enclosure, but this is considered as extra equipment. The plane is of unitarily light construction with an empty weight of only 535 lbs. The powerplant is a 65-hp. Lycoming engine.

The company's announcement described the plane as "the airplane which fits the budget of the Average Man" and various features from prospective dealers and distributors.

Performance—Performance figures listed include: cruising speed, 88 mph.; top speed, 102 mph.; landing speed, 28 mph.; takeoff run, 350 ft.; rate of climb, 500 ft./min.; service ceiling, 15,000 ft.; range at cruising speed, 250 miles; fuel consumption, 3.5 gal. hr.

Mounted on a leaf steel spring. Wings are fabric-covered wood panels attached to the supporting structure by horizontal bolts through the spar ends.

Equipment—The tandem cockpit is fitted with plywood and steel with aluminum seats with plywood bottoms. Dual controls are provided with dual controls. Standard equipment includes altimeter, tachometer, oil pressure gauge, oil thermometer, speed indicator, fuel indicator, first aid kit. The gravity fuel tank has 22-gal. capacity.

Flight and landing characteristics are described as "Empire control, easy hands and feet off in any condition of loading, control perfectly at all speeds down to the stall, easy, has perfect visibility and excellent landing characteristics."

Production of Luscomb's Reaches Six a Day

Production rate of six Luscombe Salomons a day, announced last week by Leopold J. P. Klara, Luscombe Airplane Corp. president, represents a 50 percent increase over the company's highest previous daily output of planes.

Luscombe was No. 4 in lightplane production previous when the plant was located at Trenton, N. J. Now in a new plant at Dallas, Tex., it believes it has the highest lightplane production rate of any manufacturer west of the Mississippi.

Woman Buys P-51

Madame Runway Wichita, flying instructor and former Wop fan, has purchased a surplus P-51 Mustang-type airplane. Believed to be the first woman to own one of the fast locomotives, Mrs. Runway paid \$2,000 for the plane, which originally cost \$10,000, and flew it away from Kingman, Ariz.

Mrs. Runway has been instructed as an instructor with the 15th Ferrying Group in Long Beach, Calif.

Care Heads New Mex. As'n

Clark Care of Carter-Care Flying Service, Albuquerque, N. M., was elected president of the New Mexico Airplane Association, which includes both private and professional flyers of the state, at a recent Albuquerque meeting. Other officers named were: Frank Hinkle, Hinkle, vice-president, and Harry Vorendberg, Wagon Wheel, secretary-treasurer. The association adopted a three-point program for airports in the state, at points of recreation and business interest to locate at intermediate and emergency points, and at all communities in the state which now have no airports.

New Airports Planned

A new private flying airport is expected to be in operation at Amherst, N. Y., by April 1. Miles E. Whelan, president of the recently formed Amherst Airplane Inc., said the corporation planned to spend \$25,000 in the next three years on hangars, an administration building and maintenance shops. Stephen Lee is vice-president and treasurer.



FRENCH AERO CLUB HEAD AT PIPER;

Borou de la Grange (right), president of the Aero Club de France and former member of the French Senate, arrived with Walter D. St. John, Piper Aircraft Corp. sales manager, during a recent visit to the Piper plant at Lock Haven, Pa. The Bureau of World War I military spirit, is visiting in this country recuperating from 21 months' confinement in a German prison camp and is consulting with American manufacturers and aviation authorities on aviation flying trends which may affect aviation flying in France.



Low-Cost Lightplane: Cockpit canopy will be furnished as an extra on the Ross Sport Plane which will sell for \$1,320 in its standard model.

Enthusiasm for Flying Very High in Brazil

Private flying enthusiasm is at a new high in Brazil with a shortage in lightplanes according to the demand. A CAA training supervisor just returned from that country reported that trend.

Clare D. Tippett, in Washington for a second six months before returning to Brazil has been running a school to teach Brazilian flight instructors how to use American flight training methods. Ten to 14 instructors take the course each course at a time, using CAA manuals translated into Portuguese. Regulations for private flying in Brazil are "laxed" relative to those in U. S. civil air regulations, Tippett said.

Amphibious Need—A large lightplane market exists in Amazonian marshlands, not only for sale of conventional lightplanes but for amphibious to be built along the Amazon River system. A two-place lightplane the Pegasus, with a 65-hp American engine, is being manufactured in Brazil.

Tippett described Brazilian training as "quick and simple, but not many of them are lacking in mechanical background and are unfamiliar with fundamental machinery principles known to the average American boy through his experience with automobiles."

Important Economic Factor—The lack of a major network of roads and railroads in Brazil gives aviation a large part in the economy of that nation. The average Brazilian "is as close as everybody and his family belongs to an acre club. With perhaps only one or two old planes each club is the social center of town," Tippett said.

The Brazilian commercial market, consisting of Lockheed Lodestars, Douglas DC-3's and German Junkers planes is growing in rapidly in additional planes can be found, and control of types of cargo will be in passenger.

Safety Strained—Tippett and his trainees are working to improve the private flying safety record in Brazil. In 1964 there were 54 plane accidents, other than on commercial lines, with approximately 363 civil plane flying. Weather was blamed for only 9 percent of the accidents, with personnel blamed for 25 percent.

He pointed out that lack of tow roads and railroads make navigation difficult and fields weather adds to the problem.

Briefing For Private Flying

Plans to enter factory-rebuilt Continental engines with a new engine guarantee to revolutionize used engines, announced by Continental Motors Corp., indicate the Mustang Mark organization, in considering all engines in the lightplane inventory field. For a fixed price the owner of any Continental engine can turn it in and get the equivalent of a new engine. Prices are for an A-65-B engine with model-no. 3241-50 A75-B or A75-B, B71-B, and C75 or C84, \$385. The fixed-price engine must be suitable. A non-revivable engine will be accepted at an additional charge equal to half the list price of the parts needed to make it run. The program was expected to be in full operation as of March 1, with factory-rebuilt engines available for exchange at the rate then 200 Continental dealers and distributors. The corporation expects the use of its own rebuilding facilities to make possible production line methods reducing the labor cost. Exchange figures are given for the Mustang engine because of the variety of accessories. Necessary exchanges are handled separately on a flat-rate basis. The new plan may cut considerably into maintenance and overhauls for individual operators, since the majority of part-over parts will be provided by Continentals.

AIR ASSOCIATES SALESDOOR—Designed to make use of scientific merchandising techniques, the new airport salesmen opened by Air Associates, Inc., at Teaneck, N. J., Air Terminal has been developed as a typical modern sales center for distribution of Goodhue Tim & Butler Co. aviation products. The counters and displays are so arranged that customers may be checked visually and display stands replenished from under the counter. Stock includes more than 8,000 items. The design was developed by the visual merchandising laboratories at Goodhue, which also have developed low-cost merchandise display equipment for small airport dealers. Success of the Air Associates salesmen is judged on a double of sales since its completion. Plans for visiting other Air Associates salesmen at Chicago, Dallas, Los Angeles, Atlanta, and Kansas City, now are being developed by the Goodhue laboratories.

PARKS SHINE FLIGHTWAY SERVICE—Parks Aircoach Sales & Service, Inc., has contracted for delivery of Ecopines to all five Midwest bases from the Riverside, Md., factory, by the American Pipeline Service, South Coast Airport, Dayton, Ohio. The flightway service will provide pilots in airport club planes at the Parks' gates at the factory airport, a double of sales and fly it to a designated base. Oliver Parks, head of the sales and service organization is Ecopine distributor for Missouri, Kansas, Nebraska, Iowa, Illinois, Indiana and the northern two-thirds of Ohio with bases at East St. Louis, Ill.; Kansas City municipal airport, Philadelphia Airport, Wheeling, Ill. (Chicago area), Boston Airport, Indianapolis, and Port Columbus, Columbus, Ohio.

BOOPICOPTERS, INC.—Alfred Pezzoni, Seattle, Wash., general aviation who last year announced his "Boopicopt" Boopicopter, a one-man helicopter to be worn on the back of the flyer, has formed Boopicopters, Inc. Pezzoni has selected his radical design in favor of a more conventional airplane which he now is developing at Boeing Field, Seattle.

ILLINOIS PILOT PROTEST—The recently-formed Illinois Air Pilots Association has voted public protest against the Illinois Aeronautics Department's new regulation and certificate requirement which the association says "would place a yoke upon the neck of the private pilot and personal airplane owner." Paul S. Lewis, president of the pilots' group and an instructor at Elmhurst Airport, Chicago, is calling for all private pilots to band together throughout the state for action opposing the regulations.

CONTROLABLE PROPELLERS—Controlable propellers for light-planes are coming more and more into the news. Besides the Aeromarine and Beech propellers, Bertoff Propeller Co., at Piqua, Ohio, inventors making only fixed-pitch propellers, Sonawick Brothers, at Little, Pa., the biggest fixed-pitch prop maker, and Continental Motors, have controlable, or two-position, propellers developed. The first Continental will be for a Cessna 170. The first Bertoff is expected to go in the Republic "Seabee" amphibian and may be the first reversible-pitch propeller on a personal plane.

—Alexander McCarthy

SPECIAL AIR SERVICES

CHARTER NON-SCHEDULED INTRASTATE

Independent Operators Swarm To Set Up New Uncertificated Lines

Most are clearly outside CAB jurisdiction but some plan interstate services and say Board is so far behind that they are ready to fly until ordered to stop.

An unprecedented rash of new air services for passengers and cargo, some at times definitely certificated, broke out all over the country last week as independent operators announced plans for intrastate, interstate, scheduled and non-scheduled flights on routes from a few miles in length to the recently traveled New York-Miami airway.

Most of the services—such as non-scheduled, charter lines—are clearly outside the present jurisdiction of the Civil Aeronautics Board. Some are on the borderline. Others, which are setting up scheduled interstate flights on a regular basis, admit they probably are subject to the CAB's regulation but contend that the Board is far behind public demand for all services that they are ready, willing and able to keep operating until ordered by legal action to stop.

Outlaw Miami—These operators point out that the Board has not yet set Chicago as a "restriction" line certifies an owner which they heard last year. They doubt if the total number of three-year experimental preference approvals throughout the country will exceed 15. They told Aviation News, will not meet public requirements.

The following list of new services represents one week's reports to Aviation News from its correspondents in all sections of the country.

Most Ambitious—The most ambitious project was that of Transair, Inc. of 730 Fifth Avenue, New York City, which is owned and operated by Col. George H. Buehler, a member of International Brotherhood of Deacons. Transair is chartering to Decca, Inc. Airways Agency of Miami two four-engine Douglas DC-6's which started scheduled service between Miami and New York. The agency is owned by Bradley S. Decker of Miami.

This is believed to be the first

line four-engine aircraft have been used on passenger charter service regularly. Decker also instructs four DC-3's and two Lockheed Electras from Transair, and sells seats to the public. Each DC-4 carries a crew of five—two pilots, navigator, and two stewardesses. At present Decker is operating a daily trip and a Miami-Miami route. Each DC-4 is equipped with 43 passenger seats. The first flight left Miami Feb. 11.

Col. Buehler told Aviation News his Transair line is a Miami-Miami charter service on the result of many inquiries from potential passengers.

More Flights On Way—Decker sends the Transair planes to Stennis, Mississippi, as well as to New York, although the big Douglas plane operates only to New York. Another DC-4 probably will be added to the Miami-Miami run, and a fourth will be put in service as soon as Glenn L. Martin completes its conversion.

At the end of the Miami tourist season, Decker says he will move the Transair planes north to operate out of Miami and other New England states for the summer.

Other New Services—Other new services reported last week were:

Pacific Air Lines, California's first part-time scheduled airline, is scheduled this week to begin United Air Lines its first competition between Los Angeles and Sacramento, state capital. PAL, headed by former NAAZ Lt. Lester R. Cougle, began its run two non-stop round-trip daily on a 3-hour, 35-min schedule using DC-3 equipment with stewardess service, against UAL, scheduled which runs from 3 hrs. 35 min to a "quick way" trip once a week on 3 hrs. 35 min. Buehler will be at Lockheed Air Terminal.

Associated with Daniels, who is general manager, are Earl B. Gilmore, founder of Gilmore Oil Co. president, George Young, Los An-



The Latest News, Copies of the New York Times Let Air Corps members be placed elected on Air Corps Transport Corp. plane at Newark for flight in Washington, D. C. (Story on Page 14)

gelo super-market owner, treasurer, Thomas W. Simmons, Warren D. Phillips, attorney, Loren T. Thompson, ex-executive, and Ralph Pizani.

The company is organized as a California corporation of \$200,000 capitalization, all shares held within the company.

Engage Airlines, Inc., Uta, N. Y., has increased its authorized capital from \$120,000 to \$400,000, according to a company statement, Allstate & Company, New York City.

Columbia Airlines, Columbia Municipal Airport, has discontinued charter flights with its two Boeing 370's from between Baltimore and Miami.

Northern Airlines, Everett Field, Seattle, made the first trip Feb. 8 from Seattle to Anchorage and Fairbanks, Alaska, using a DC-3. Two round-trips a week are anticipated, except on Saturdays and Sundays, and on the week of the United Air Lines its first competition between Los Angeles and Sacramento, state capital. PAL, headed by former NAAZ Lt. Lester R. Cougle, began its run two non-stop round-trip daily on a 3-hour, 35-min schedule using DC-3 equipment with stewardess service, against UAL, scheduled which runs from 3 hrs. 35 min to a "quick way" trip once a week on 3 hrs. 35 min. Buehler will be at Lockheed Air Terminal.

Associated with Daniels, who is general manager, are Earl B. Gilmore, founder of Gilmore Oil Co. president, George Young, Los An-

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Marin will build experimental craft scheduled for first tests in 1947; based on 40-passenger Model 303, it is expected to cruise at 385 mph.

In the first departure from conventional power in commercial transports, United Air Lines announced last week that it has commissioned the Gotha L. Murot Co. to build an airliner equipped with two General Electric prop-jet turbines.

The powerplant similar to the one used in the forward engine of the recently-announced Convair F-40 fighter will give the ship, basically the same design as the 40-passenger Martin 304, an estimated cruising speed of 465 mph and top speed of 485 mph. This is the first public announcement of the use of two such powerplants on a single ship.

► To Be Ready in 1947—The plane, which is expected to be ready for experimental test flights during 1947, will be used at first only in cargo. Whether orders for passenger versions with pressurized cabins will be placed depends on the outcome of those tests.

The plane is now in the engineering design stage, and the carrier and manufacturers expect it will be two years before it would be ready to go into service as a prototype.

transport. Fast of the JS model 301's the engine has an underwing Pratt & Whitney double row Turbo—its to be delivered early in 1987.

Cost Not Assured—Cost of the new plate, which as yet does not have a model number, was not disclosed. United expects the 25 283's, which will cruise at about 300 mph to cost a total of approximately \$500,000.

In the new, plane's turbine engines, air enters via the front of the engine core, flows through compressors to combustion chambers where it is mixed with low-cost fuel—usually kerosene—and ignited. The hot gas passes at high velocity over a turbine and is expelled through jets under the plane's wing. The propeller with turn at about 1,400 rpm. Turbine speed is 10,000 rpm.

P-Expected Advantages—While fuel consumption is greater in the first two engine settings, savings are expected to come through lowered fuel and maintenance costs and added speed. Partially offsetting this will be a take-off weight of 18,000 lbs., versus 25,000 in the 737. Looking



United Air Lines Experiments: *Jetair's* conversion of the high-speed transport with prop-jet propellers ordered from Martin AC (later) Air Lines. Cruising at 265 mph with a top speed of 285 mph, the plane is expected to make possible an eight-hour nonstop coast-to-coast trip to New York.

West Coast members of the American Society of Mechanical Engineers were given material for extended debate recently when they heard Dr. Lionel S. Marks, Gordon McKay Professor, Executive of Mechanical Engineering at Stanford University, speak high-speed jet transport planners.

Dr. Marks spoke as national lecturer of the ASME at a meeting at the University of California at Los Angeles.

Fastenats 400 mph limit — He asserted air transport will be limited to speeds under 400 mph, and probably to speeds of less than 300 mph and limited "all-utility" use; the assumption that the turbo-propelling engine and propeller are becoming obsolete. He holds that there is no commercial future for jet aircraft.

In Munich, predicted, his stance on the notion that diminishing returns will preclude the boosting of commercial transport speeds to the point where jet power will become economical. Fauriol's diagnosis is one of hope of working, economically, any transport speeds appreciably higher than those now obtained, he feels.

► **Seen Engineering Gears**—He said he is ready to admit that turbines, aircraft, will fly at supersonic speeds, but he believes their useful loads will be negligible. He focuses on the ultimate goal of overall jet engine research: the acquisition of knowledge which will lead to the designing of heavy industrial turbine engines of extreme efficiency.

weight will be 34,000 lbs., about the same as the 302 and payload of the all-range version was increased to 5,500 lbs., also about the same as the 302.

The turbo-jet plane will have fuel consumption of about one unit per gallon against one and a half in conventional engines.

Chance Vought Division of United Aircraft Corp. has started a campaign to entice its engineers and staff for major aircraft development work being undertaken. Company representatives are visiting universities and colleges to interview men who work graduate this spring. Most needed are laser physicists, slice capacitors, and dynamometers and testing engineers.

It won't take Ulysses
years to get home...
He'll FLY to Ithaca.

Quite a boy, this Ulysses, judging from what he accomplished in that Trojan affair!¹ But his old-fashioned mode of travelling certainly slowed his direct steps down to see Cloe and Calypso (he spent a 7-year "workweek" at Ogygia) made his trip from Troy to Ithaca rather lengthy. Today, in a neat little Germanic Widgeon, he'd FLY home in a mere matter of hours... and his good wife Penelope would be much happier about the whole thing.



Going places—for business or personal reasons—takes far less time than it once did, thanks to modern planes. And thanks, too, to Curtiss Steel Tubing, which contributes important strength and weight advantages to every U.S.-built plane, large or small. This preference for Curtiss is de-

to the skill, experience and high-quality that have marked Oerrega products since the first days of tube making. A never-ending program of research and development, intended to create even better Oerrega Steel Tubing in the future, will maintain that excellence in the years ahead.



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REFERENCES

Consolidated(To)Begin On Model 240 Soon

With the test flight at Consolidated Valer's Model 118 transport tentatively set for early April, the company expects shortly to begin construction of the prototype Model 240, the larger and faster successor to the 118.

American Airlines has ordered 100 Model 240s at a price of approximately \$200,000 each (Aviation News Jan. 3). The 240 is designed for 40 passengers, as compared to the 118's capacity of 30, and has a cruising speed on about 90 percent power of 307 mph, as against the 118's 250 mph.

Differences Outlined—Dramatic differences between the two designs. J. M. Ladden, Convair executive vice-president, disclosed the increase in speed is due to decreasing the diameter of the fuselage and by reducing the wing area. Reduction of the powerplant nacelle is another factor. The all-steel wing planned for the 118 nacelle is eliminated.

Changes in size of propellers also make the latter more efficient, Ladden explains. The 240 will have three-bladed Hamilton Standard reversible pitch propellers of 13 ft. 1 in. in diameter, while four-bladed propellers of 12 ft. 3 in. were proposed for the 118.

Other Changes—Changes in the nacelle design also contribute to greater visibility at door clearance of the gull wing incorporated in the 118. The landing gear wing structure runs the fuselage in re-



For Safety: Consistency of wing section of Consolidated Valer's Model 240 40-passenger transport, showing arrangement of fuel cells. As a safety feature, normal fuel load will be carried only in the outboard tanks, which have a capacity of 598 gals. and give the plane a range of cruising speeds of 740 mph. Detail sketch shows construction of the post-flight corner between spar and bulkhead.

Marchev Urges Production Reorientation

Alfred Marchev, president of the public Aviation, made some rather pointed remarks about the aircraft manufacturing industry before the Baltimore session of the Society of Automotive Engineers recently suggested it might well leave the realm of commonplace and standard aviation which the automobile makers have entered so well.

"Aviation wants to fly," he said, "but the industry is going to meet the bill and lose as much opportunity for growth and advancement" unless it leaves these low-costs.

Sets Price Goals—He told the Society that the aircraft industry must learn to produce a four-engine amphibian for \$3,000, a four-engine landplane for \$1,800 and a two-place landplane for \$1,300.

Marchev then admitted that a 10- to 12-cylinder multi-engine aircraft didn't have the records and ability to do so, he thought the company did.

Aviation Engineers—Contending that the money charged for light-planes today are "a disgrace," Marchev said one of the troubles with the industry is the "perpetual refusal of design engineers to recognize the commercial aspect of the business."

"Our aeronautical engineers simply are not price-conscious enough," he said. "Lots of people must be dissatisfied at the idea that simply because an article is to be incorporated into an airplane it must sell for a fabulous price."

Engine Companies—Marchev suggested, as a short-term popularizing plane prices, the airplane industry should "go to work on" the manufacturers and suppliers of aircraft components such as propellers, instrument panels, radio communication equipment and tires and get them to simplify their manufacturing methods and produce their equipment at drastically lower prices.

New PCA C-54 Has Improved Weight Plan

Additional seating capacity and solution of balance problems are features of PCA's revised version of C-54, ordered early last week after conversion by Glenn L. Martin.

Revised passenger capacity of the second phase is 57 seats. The first delivered earlier this year, had 56 seats. Only 43 or 54 of these could be sold however, depending on forward weight.

Weight Skewed—In the second ship, water tanks for lavatories have been moved forward, with pipe connections to the rear. The alcohol drinking tank also has been moved forward, and 508 lbs. of permanent lead ballast have been installed in the extreme rear of the plane.

The buffet, previously as two sections on either side of the entrance door, has been rebuilt into one larger section immediately aft of the door, with a small storage compartment on the other side of the entrance door. The plane has 58 seats, but two in the rear will be reserved for ballast. The buffet rearrangement permits addition of one seat to a row that formerly held two.

The second plane will fly on PCA's Norfolk-Washington-Chicago run while the first goes back for re-arrangement according to the new pattern.



METEOR NOSE GEAR

Details of the retractable nose wheel of the Gloster Meteor, British jet plane, are shown in this photo taken in an RAF hangar in England.

Swedes Sign Contract for Vampire, Goblins

Three long-term contracts have been signed between the Swedish government and the British de Havilland Aircraft Co. The first contract calls for the supplying of a large number of Vampire jet fighters and the second is for Goblin trainers. The third covers terms for a license to manufacture Goblins in Sweden.

The three contracts were said to represent one of the largest orders ever received by a British aircraft manufacturer.

Detroit Plant Sold

A small plant operated in war-time by Continental Aviation & Engineering Corp. in Detroit has been sold to Samuel G. Keywell Co. for the manufacture and fabrication of non-austenitic steel products. Consisting of two buildings with a total floor area of about 21,000 sq. ft., the plant was constructed years ago and bought by the Government in 1945. While the reproduction cost of the establishment is estimated at \$195,734, it has been sold for \$20,000, some including one five-ton bridge crane.



Fabricating from Strip and Welding to meet X-Ray Inspection

● In line with other developments B&H perfected the fabrication of liners and spacers and welding them into a solid piece that will meet X-ray inspection.

This method has shown radical savings on a wide range of work developed from formed wire or strip into solid pieces which were formerly machined from forgings, seamless tubing or bar stock.

This knowledge is now available to all manufacturers taking pride in the quality and performance of their product.

If the job is circular—consult B&H for precision-production—low costs.

OUR NEW BOOKLET gives details on this and many other facts and cost saving ways in making Precision Gears, Snap Rings, Oil Seal Rings and Spacers. Write for it.





New "Wendell". Drawing of a 10-place helicopter prepared by Doman-Pratt Helicopters, Inc., latest entry in the rotary wing field. Prototype craft of the company is expected to be finished this Spring.

New Firm Planning Commercial 'Copters

A new company with plans to build helicopters for both private and commercial use has been formed by Gladys S. Danks and Charles W. Fraser, both aeronautical engineers formerly employed by Sikorski Aircraft division of United Aircraft Corp.

Organized for the express purpose of developing and manufacturing prototype and cargo-carrying helicopters for suburban shuttle lines, Doman-Pratt Helicopters, Inc., believes it can lower the cost of helicopter manufacture sufficiently to attract private means alone.

Building Prototype—Doman, president of the new firm, declares it has developed methods of eliminating many problems involving safety control vibration and maintenance, and that construction of a prototype is now underway at Stamford, Conn. It is expected to be ready to fly in the Spring.

Danks, a graduate of the University of Michigan, has worked at Avco-Ryan Aircraft Corp. and Ransel Aircraft Division of Fairchild Remington Aircraft Corp. Fraser, a World War I pilot, undertook a special rotary wing research project for the New York Research Corp. during World War II. The company's headquarters are at 545 Fifth Avenue, New York City.

SAE Aero Session To Feature Planning

Program for the SAE National Aeronautics Meeting to be held April 2-5 at the Hotel New Yorker, New York, features discussion plan-

Last Die Catalog

The fourth and final edition of the Catalog of Aluminum Extrusions Dies, made by the National Aircraft Standards Committee of AIA, now is available. Started early in the war as an emergency expedient, the catalog provided dissemination of dies, alleviating critical shortages of extrusions by lightening the burden on aluminum alloy mills. Made it was prepared for the aviation industry, the committee feels it should in turn, inspire concerned with applications of extrusions in design selection in manufacture.

Copies of the compilation which gives die numbers and dimensions, information on 19,621 dies developed during the war for the aircraft industry may be procured from the publisher, The John S. Smith Co., 405 W 30th St., New York City.

ing to meet future engineering requirements of commercial and civil aviation.

Suggested plans for private owners, selection of aircraft for air transport operations, effective utilization of waste exhaust gases, progress in and applications of jet engines, airlines operating requirements and use of new materials in aircraft construction are among the subjects of technical papers to be presented.

New Developments Seen—John A. C. Warren, general manager, in announcing the program commented that it was "evident that tremendous developments in commercial and private flying are directly ahead, and that aeronautical engineers contemplate putting such developments on a soundly technical

engineering basis."

SAE, he added, is functioning as the medium for these cooperation and that SAE desires to help the engineers of the aircraft industry to produce maximum results in minimum time.

The meeting will be sponsored jointly by the SAE Aircraft Aircraft Powerplant and Air Transport Engineering Sections, with the cooperation of the SAE Metropolitan Section. General chairman will be Harold B. Harris, vice president and general manager of American Overseas Airlines.

Continental to Produce 9-Cylinder Radial Engine

Production of a new nine-cylinder radial air-cooled engine for post-war executive and medium size transport planes has been started by Continental Motors Corp. for Beech Aircraft Corp. and Lockheed Aircraft.

C. J. Rouse, Continental president, and substantial orders have been received for the new engine which has a take-off rating of 575 hp with a direct drive and 660 hp with a geared drive.

Based On War Model—The new engine is an expanded version of the B-253 425-hp radial engine which Continental built during the war to power medium-30-ton tanks, amphibious tanks and tank destroyers. Rouse said power output and other performance characteristics have been greatly improved for aircraft use.

Dutch Commission Orders Conversions From Mason

The Netherlands Purchasing Commission has signed a contract with the Mason Lines for conversion and overhaul of four-engine aircraft at Mason's aircraft conversion and modification center at Oakland Municipal Airport. Mason has been requested by the Commission to select and buy the planes for the commission and fly them to Oakland.

Mason recently announced its entry into conversion and overhaul of twin- and four-engine aircraft on a commercial basis for manufacturers and foreign and domestic airlines, following the leasing of hangar facilities at Oakland. The shipping company has been engaged in similar work for the Navy during the past two years.



with a Beech Controllable Propeller". It's controllable throughout its entire range. With it you can easily change your prop setting from the cockpit in flight from cruising "high" through a wide intermediate range to take-off "low," to get the best possible performance under any condition. Without it your airplane is like a car with only one gear.

With a Beech Controllable Propeller you get an economy boost too. For by controlling pitch to slow the engine to turn at its best operating speed under all conditions, you get more miles per gallon of gas, less wear and tear, and more hours of flying between engine overhauls.

You'll find the Beech Controllable Propeller is light in weight, simple in design, rugged in construction and easy to install. It will give your airplane the extra performance you want.

Ask your nearest Beech distributor about the Beech Controllable Propeller or write us for descriptive literature.

*Illustrated with Beech controls.

Beech Aircraft

DESIGNED • ENGINEERED AND BUILT BY THE BEECH AIRCRAFT CORPORATION
IN RECOGNITION OF THE UNIVERSITY OF MICHIGAN



Beechcraft Controllable Propeller. Also shown is the new 9-cylinder radial engine. The 9-cylinder radial engine is installed. General all round performance is improved. Propeller, which weighs 25 lbs. less, is the lightest of its power by 125 lbs. horsepower.

Single engine performance, and available with Beech Controllable Propeller. Also shown is the new 9-cylinder radial engine. The 9-cylinder radial engine is installed. General all round performance is improved. Propeller, which weighs 25 lbs. less, is the lightest of its power by 125 lbs. horsepower.

Added performance is given to the Controllable Propeller with this installation. A Beech Controllable Propeller is installed. The 9-cylinder radial engine is installed. General all round performance is improved. Propeller, which weighs 25 lbs. less, is the lightest of its power by 125 lbs. horsepower.

FINANCIAL

Airline Shares Heavily Mauled In Recent General Selling Wave

Paper profits counted solely on basis of potential earnings, disregarding basic asset position, began to evaporate. TWA and Colonial register sharpest declines.

Arbitrage players took a bad beating in the general selling wave that hit the markets recently. Many investors in online stocks learned what experienced traders have frequently cautioned—that prices are no one way street affair.

During 1945, air transport securities led the market in the general advance. Gains were recorded solely on the basis of potential earnings. Little regard was given to basic or net positions. Airline stocks sold anywhere from 2½ to 34 times book value in this process. Tremendous profits—paper profits—were built up in many market accounts.

P Profits Evaporate—Many paper profits began to evaporate in the selling waves that hit the markets recently. The decline was attributed to a variety of causes. The most popular one: technical reasons—the market moved too rapidly and was due for adjustment. Further, many speculators and investors were in a position to accept profits and benefits from the long-term holding capital gains program of the extreme low low.

Over-shadowing the markets was the general uncertainty attributed to the tightening controls over business due to the new price-control regulations.

Little Support Found—Regardless of the causes some of the same forces that helped accelerate airline price movements on the upside operated just as well in the opposite direction. Thin markets were everywhere in evidence with little support available when blocks of airline shares were thrown on the market. The accompanying table shows the extent of the declines for all active airline shares.

Decreases from 1985 peaks range from 28 to 38 percent. The cheapest drugs were regulated by TWA and Colson.

Place for Correction—The shares of these companies led the previous

also and were logical candidates for conversion. Further, TWA has substantial leverage in its capital structure by virtue of the \$300,000,000 loan preceding its stock. Colonial was forced to hit some air pockets after its sharp run-up due almost entirely to technical market conditions.

Underlying what dropped 31 percent from its 1945 peak had to carry the additional load of heavy investments from its perfected environment. In the turbulent market scenario, there were excellent opportunities to shunt into Unifac's preferred and common stocks. At the price of three and one-third shares of common for each share of preferred, by watching price spreads there were periods when the investor could have been purchased and the common sold with a net profit resulting. Such profit opportunities will continue to prevail until the preferred is finally retired next April 3.

3 "Short Positions Lacking"—It is likely that crypto markets will continue to prove for some time. Recent margin requirements calling for cash purchases virtually eliminates the speculators' support that would previously be present in the market. The almost complete absence of "short" positions in a share market also removes any support that could be expected in periods of sinking prices.

The only consequential short position among the airlines, appears to have been in United. The short interest in this stock increased to 12464 on Feb. 16 from 7369 shares on Jan. 15. The very small capitalizations of most airline companies makes it very risky to attempt any short operations. There is constant possibility of being "squeezed" and forced to pay through the nose for shares that have been sold but can't be delivered. United, with its large

relative capitalization, was less game for a short position by market traders who were aware of the pressure due to be bid by the preferred corporate debt.

Report: HPI Not Inclusive—Airline share prices will be greatly influenced by forthcoming exchange reports. Undoubtedly, some of these reports may state that it is better to hold cash than to own a common stock. TWA said that the delay in its foreign operations due to the past dispute resulted in a loss of over \$1,000,000. Virtually all of the current was a liability but by aggressive flying schedules during last year, TWA was able to pay off its debt, showed smaller deficits for the current year. The cost of converting DC-6's is also coming out of current operations and as a strain on earnings. Expanding operations in all departments and increasing personnel are also being considered and may be met from new port facilities.

Under such circumstances, fourth quarter results of 1945 and even for the first few months of 1946, may most likely be very disappointing to airline investors. With the future of the industry strongly discounted in a substantial manner, it is difficult, under present conditions, to see where new buying support for air transport securities may develop over the near-term period to any extent.

Beech Studying Aluminum Prefabricated Dwellings

The houses will have 1,200 sq. ft. of floor space, can be knocked down and packed in a crate 4 by 4 by 38 ft. and put up in 10-man days, it is stated.

	1991-1996	1997-2000	2001-2005	2006-2010
Gasoline	84%	83%	82%	81%
Hybrid	1%	2%	3%	4%
Electric	0%	0%	0%	0%
Plug-in	0%	0%	0%	0%
Gasoline	84%	83%	82%	81%
Hybrid	1%	2%	3%	4%
Electric	0%	0%	0%	0%
Plug-in	0%	0%	0%	0%



The Birdmen's Perch

* Major Al Williams, alias, "TATTERED WING TIPS,"
Gulf Aviation Products Maroon, Gulf Bldg., Pittsburgh 30, Pa.

have time for them. They'll all be up at 10:00 here, checking the dials! On in-

And snapping only long enough to rack up with Good Golf Avatar Unlimited and enough Golfpods OK to lubricate all those lovely muscles.

From 1990, birds

ABOUT YOUR PLANE...

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It doesn't matter a bit how much trouble we go to in selecting the best order—how much extra work we do in doing that. How many additional steps—such as the *Alchimie Peacock*—we take in making Gullipede Oil the best engine lubricant in the world—if you forget something as simple as your lubricant, you're in a bad way.

This is important! Probably one of the



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Check plugs, dome screens and 45-mm. Chyl, the seal, for proper mounting; leaks, dents, and looseen. Tubing and hose, hose connections and clamps should be inspected, as well as shut-off and drain valves.

Check the filter cage, the dip switch, and
start time.



Well, that's all there is to it, you flying deli-
deli! Seal to your feet in the
shoes above (toss up there on the
moon!) and if it's good—and proved—
you may achieve the promise of eternal
adulthood, a commission as First Pilot
(or)

Gulf Oil Corporation and Gulf Refining Company...members of



FLUTTER'S DIRTY BOX™
The most powerful fuel I have seen
is Gulf Aviation Gasoline!
For the heart that you get
is like rockets... and jet...
This domestic... alone... and alone!

^aBased in part "Elly" and help our puppy postcard. ©2005

PERSONNEL

Byers Named Assistant To Beard or Braniff

Russ Byers (photo), who recently returned to Braniff Airways from military service, has been named administrative assistant to Vice President and Chief Executive Officer Charles F. Beard.



The duties will include administration of general traffic office, including employing and training of the clerical and stenographic personnel for the night division of the traffic department.

Robert Robinson (left) has been named executive assistant to United Air Lines' public relations department in Chicago. Robinson formerly was a traffic representative for United



at Philadelphia. E. L. Mathison (right) of Mathison's engineering department has been appointed resident representative for the airline at the Glenn E. Martin plant, Baltimore.

Col. Glynn H. Jones, former pilot-in-command of New Orleans Airport, is slated to take over as director of aviation at the City of New Orleans. He will be in charge of the town air terminals, Municipal International Airport and Alvin Cullender Field. Sanchez is now staff in the present city director.

Paul H. Niles (left) has been named sales promotion manager. He formerly was in traffic executive and director of research for the airline.



Douglas Wood (center), former traffic manager in Dallas for Braniff

has been named manager of a new central traffic division with headquarters in Dallas. E. S. Altrider (right) has been appointed in the newly-created position of passenger service manager for the airline. This is a new executive position. Altrider is an AAF veteran with a 14-year background in commercial aviation.

William V. Humphrey, managing editor of *Industrial Aviation*, and formerly with the United Aircraft Corp., has joined Tipler Associates, Chicago public relations firm as a partner.

John H. Strajus has been named manager of the promotional material division of the H. F. Goodrich Co. This division was formerly known as the dealer and fuel division.

Joseph W. Meyer, flight supervisor of Chicago & Southern Air Lines, has been named superintendent of stations, overseeing R. G. Gabele, who recently resigned. R. G. Meyer, district sales manager of the Chicago office, has been transferred to the general office at Memphis to handle special research and study of passenger handling procedures.

Raymond N. Peck has been promoted to assistant executive manager. Robert G. Bocklage is technical supervisor service and Donald S. Pierce is field supervisor-service of Pratt & Whitney Aircraft division of United Aircraft Corp.

Col. A. F. Stern, Jr. (photo) has resumed his duties as manager of advertising and publicity at the Aerospace Aircraft Corp. of Middleburg, Ohio. Following several staff assignments overseas, Col. Stern was made a member of the U. S. Strategic Bombardment Survey and was co-author of "The Effects of Airpower on the War in Western Europe." He originally joined Aerospace in 1952.

E. S. Burksdale, formerly vice-president in charge of engineering and sales of the Naval Co. San Angeles, has assumed complete charge of the hydroplane division. L. M. Swadlow has been appointed general sales manager in charge of both seaplane and industrial sales.

Havens Joins Consolidated As Assistant to Biles

Consolidated White Aircraft Corp. announces that Carl Havens (left) has joined the company as assistant to W. A. Biles, vice-president in



charge of sales. Havens will supervise the aircraft company's advertising, sales promotion and public relations. John Ritt of Ritt & Knowlton Public Relations Agency will continue with Consolidated as a consulting basis. Havens formerly was an automobile man. Bryce Wilkins (right) has been appointed western regional sales manager for the firm. His division will headquarters in San Diego. He has just been released from the Army.

Carl H. Knott (photo), formerly a vice-president of the National Cash Register Co., has been named vice-president in charge of manufacturing for The Aviation Corp. and its associated companies. Knott has been associated with Westinghouse Electric Corp. and was general manager of the Detroit Products division of General Motors. His headquarters will be in Detroit.

John J. Wagner (photo) has been appointed Little Rock area sales representative for Lockheed Aircraft Corp. A western pilot and sales representative in South and Central America, Wagner will coordinate Lockheed's sales and service activities in Latin America for both military and commercial transport planes.

Walter A. Brown, formerly vice-president and treasurer of Lawrence Aircraft Corp. of Los Angeles, has been elected vice-president and treasurer of the Avion Manufacturing Corp.

Walter A. Brown, formerly vice-president and treasurer of Lawrence Aircraft Corp. of Los Angeles, has been elected vice-president and treasurer of the Avion Manufacturing Corp.

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Participation of U. S. Airlines In IATA Conferences OK'd By CAB

Temporary approval extends until Feb. 28, 1947, and applies only to traffic conference machinery; all agreements reached must be sanctioned by Board.

By BLAINE STUBBS

Participation of U. S. airlines in conferences of the International Air Transport Association, dealing mainly with establishment of rates, has been approved by the Civil Aeronautics Board in a three-to-one decision of top importance to the country's future international air transport.

The Board's approval is temporary (until Feb. 28, 1947) and extends only to the traffic conference machinery, not to agreements that may be reached at the conferences.

Safeguard Provided—Safeguard against possible agreements inimical to the public interest is provided in requirement that all agreements must be submitted to the Board for approval.

"Because this is an era of great fast in international air transportation and speed is essential during such a period," the Board will not approve any agreement which does not include provision for its own termination within a reasonable period.

Details of Operation—International air traffic in passenger, mail and cargo will be dealt with by the conference under seven headings: (1) tariffs, rates, and schedules; (2) general conditions of carriage; (3) traffic forms, documents and procedures; (4) reservation codes and procedures; (5) government forms, regulations and procedures; (6) rates of advertising and publicity; (7) activities of agents.

Also regional traffic conferences covering the entire world, were established by IATA's resolution. The first regional conference, that of the North Atlantic, was held in New York last week (See Page 30).

Majority Opposes—In their majority opinion Chairman Pogue and Members Branch and Ryan and the Board would reserve its request to Congress for the same control of rates on U. S. flag foreign air services that it now has over those of domestic lines. CAB has already started to draft this legislation.

The Board said it was not clear whether the conference would ex-

ercise any control over frequency of schedules, but would of "the greatest difficulty" if the Board is asked to approve any specific schedule agreements, thereby appearing to reserve the authority for the State Department and itself.

Board's View of Issue—The issue presented in this case, viewed by the Board, is whether the Board shall effectively influence the rates charged by U. S. international carriers or whether the rates shall be subject to its control by the government, thereby providing aviation control by other governments.

Disapproval of the conference, the Board said, would have struck down the only existing machinery for rate control, and at the same time stripped CAB of its only jurisdiction over (international) rates. No laws of the U. S., the opinion says, could prevent U. S. carriers from being forced to agree with other governments on rates to be charged.

Dispute Go To PICAQ—The Anglo-American Bermuda conference, which organized the IATA resolution, provides that any rate disputes or claims between these two countries be submitted to PICAQ or its successor for an advisory report.

The Board takes a strong stand for independent action by any carrier, since it has complied with conference procedures. In other words, if the carrier cannot get a conference vote approving a rate cut, the carrier can cut the rate anyway, and hope that the conference involved will agree to it, or that PICAQ can bring about an agreement.

Plan Dismissed—Member Jack Lee wrote an exhaustive dissenting opinion, contending that the conference agreement was adverse to the public interest and to the government's policy of nonparticipation in the air.

Bermuda Agreement Discussion Continued

Prodominate question at last week's Senate Commerce Committee hearings on the Bermuda agreement continued to be whether the U. S. or Great Britain retained greater power.

Senators Pat McCarran and Owen Brewster and other proponents of the "community company" proposal contended the U. S. had recovered the "great stuff" of the bargain. CAB Chairman E. Welch Pogue, George P. Baker, director of the State Department's Office of Transport, and Sen. Warren Magnuson, on the other hand, viewed the agreement as a matter of conces-



This flame-thrower test broke an old rule

These two piston rings are revolving through oil bowls and a flame. The regular engine oil on the one is right shrinks from the heat, the flame "sucks" it off the wall. According to Healy, that should happen on both rings. But the RPM Compressed Aviation Oil on the left hand ring breaks a rule. It stays put—right through the flaming flame.

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NEW SABENA DC-4 LEAVES FOR EUROPE:

The new Douglas DC-4 transport, first of four purchased by the Belgian airline, Sabena, took off from Baltimore Municipal Airport recently on a ferrying flight to Leopoldville, Belgian Congo, via Brussels, the Azores and Brest. Crew of four included four Sabena employees and five members of the Belgian Royal Air Force. Douglas engineers accompanied the ship to Baltimore and made final landing gear adjustments. The airport was closed on the last American stop to permit Bendix Radio Division engineers to make final checks on the plane's communications equipment. According to A. V. Z. Verschuere, Sabena's operations manager, the ship will go into service soon on the Brussels-Leopoldville line.

plans on the part of both parties which would benefit the air community as a whole.

Efforts Dismissed—The effect of British airline operations in the U.S. on exclusively U.S. domestic carriers was discussed at length. The possibility of British lines replacing through traffic to foreign points from domestic U.S. lines was considered. Sen. Magnuson, however, took the position that Americans will want to fly American wherever possible.

People admitted the possibility of exclusive U.S. domestic carriers striking passenger-transfer agreements with the British line—or other foreign lines which may arise. Fifth Freedom operating rights in the U.S. in the future—last pointed out that all such agreements are subject to CAB approval and can be prohibited if deemed against public interest.

N. Atlantic Traffic Conference Opens

With airline fares across the North Atlantic the main issue at stake, the North Atlantic Traffic Conference of the International Air Transport Association worked throughout last week in New York to solve traffic problems of the international operators in the area encompassing all of the North Atlantic north of the Tropic of Cancer. The line between New York and London was only one of the points for consideration but interest in it had been assuaged by the PAA-British controversy and it appeared to subside at final conference action that this figure would be in the neighborhood of \$100, an amount the IATA has charged for a time by PAA and the present \$120.

Sound Forecaster—More important in the thinking of many of the 46-odd airline men in the conference than the setting of a particular rate for a particular route was the need for a more sound theory of rate-making which would give John G. Pabst the greatest benefits and at the same time allow air transport to progress and develop.

This approach derived additional backing from the fact that this conference was the first of the nine traffic conferences of IATA to meet and its actions might set precedents for other conferences to follow.

Conference Procedure—At the initial meeting of the conference last Monday in the Hotel Pennsylvania, John Slater, chairman of the

Truman Hails Pact

President Truman last week hailed the results of the recent U.S. British air transport conference in Bermuda as "a very important forward step which gives to airline operators the great opportunity of using their initiative and enterprise in developing air transportation over great areas of the world's surface."

He asserted that under the Bermuda agreement there will be no control of frequencies and no control of Fifth Freedom rights on trunk routes operated primarily for through service. "In the Bermuda agreement," the President continued, "the Executive Branch of the U.S. government has consented to a plan for the setting up of an agency which should protect against the type of rate war feared by so many of the carriers, through which air space we desire that our airlines have the right to fly."

based of American Overseas, was named chairman. Other officers named were Vernon C. Craig, regional director of British Overseas Airways Corp., first vice-chairman, Victor E. Chene, PAA vice-president and general manager, second vice-chairman, and A. Lawrence Young, secretary of IATA's traffic committee, secretary. Working committees were then selected to tackle the main problems—rate on tariffs, rates and subsidies, a second on general conditions of service, a third on reservations procedures, and the fourth on agents. These committees met in closed sessions to develop recommendations which were to be presented to the conference for action at the end of the week.

CAB already had approved the IATA subsidiary but rate approval by traffic conference men was submitted for specific approval and a final vote was expected soon. A decision by the North Atlantic group could not be put into effect for from 30 to 45 days.

The Committee—The members of the working committees follow:

Tariffs, Rates and Subsidies—R. O. Cooke, Transcontinental & Western Air, V. E. Chene, Pan American, V. C. Craig, BOAC, Gordon McGregor, Trans-Canada, Tair H. Hyatt, SIA, and John Slater, ADA.

General Conditions of Carriage—J. R. Davis, TWA, P. S. Dufay, PAA, N. Edwards, SIA, S. S. Green, ADA, H. J. Lester, Air France;

Gordon McGregor, TCA, C. F. Menner, KLM, Lion Air, United, J. B. Thomas, BOAC, Mike Westphal, IDL, (Danish Airlines) and P. M. Wilcox, DNL and RNAT (Norwegian Airlines and Royal Norwegian Air Transport).

Reservations Procedures—Charles Cole, PAA, Thomas Connell, United, W. J. Dufay, TCA, R. W. King, AA, H. J. Lester, Air France, William Sasser, TWA, Miss M. McInerney, KLM, P. S. Dufay, SIA, J. B. Thomas, BOAC, Mike Westphal, IDL, and P. M. Wilcox, DNL and RNAT.

Agents—Paul Beeches, BOAC, W. J. Dufay, TCA, H. Gyllenward, SIA, H. J. Lester, Air France, H. C. Longmire, PAA, David Mudge, TWA, Miss M. McInerney, KLM, L. B. Kuper, United, J. H. Thwing, ADA, Mike Westphal, IDL, and P. M. Wilcox, DNL and RNAT.

Problems before the committee on general conditions of carriage included the question of discounts on roundtrips, the handling of children and baggage allowances.

Observers Present—Observers attending the conference included H. J. Symington, TCA president and president of IATA, Charles A. Bannerman, AA, Harold Cray, United, and H. D. Stewart, BOAC.

Other Conferences—Initial meetings of two other traffic conferences have been announced from IATA's head office in Montreal. The European Traffic Conference will meet Mar. 31 in Paris and the Middle East Traffic Conference Mar. 20 in Cairo.

Appeals Court Refuses Panagra Case Rerouting

The petition of Pan American Airways and Eastern Air Lines for rerouting of the Panagra terminal case has been denied by the U.S. Circuit Court of Appeals. The court last month remanded the case back to CAB, which in 1944 had declared jurisdiction to deal with a route application filed on behalf of Panagra by W. B. Green & Co., half owner, PAA, half owner, had declined to back an application by Panagra for a Canal Zone-U.S. link.

Essair Won't Protest Rate

Essair, Inc., Texas fuel-fitter, has announced it will file no objection to the 30-cent revenue mail temporary mail pay set recently by CAB. The carrier will defer presentation of its case for higher pay until the Board is ready to set a final rate.



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New Procedure Set At Engineering Forum

Specific items such as airline docket specific type or Detroit conference under new plan.

By MERLIN MICKEL

DETROIT—A new approach to airline maintenance problems with a specialist from each airline assigned a specific subject for study and report, was tried out here last week at Air Transport Association's first post-war engineering and maintenance conference.

Conference officials said it would set the pattern for future meetings.

Problems Too Complex—Technical problems of the maintenance men have become too manifold and non-gives for detailed consideration at a general meeting, and the new method of presentation replaced the pre-war spontaneous off-the-cuff discussion, is considered by its proponents as the best alternative. Twenty-six maintenance subjects were considered at the Detroit conference. The 23rd such affair. An airline representative familiar with the topic who had either visited or sent questionnaires to other airlines to obtain benefits of their studies on the same question presented a report on each item.

Discussion Limited—Representatives of all airlines and CAB, CAA, Army and Navy then participated in reasonable comment, with questions from the floor permitted thereafter. Time on each subject was limited because of the heavy agenda.

A verbatim record of the proceedings was taken, and pertinent parts will be sent to concerned departments on the airlines.

More Than 200 Attend—Held under the chairmanship of Otto E. Kuchner of American Airlines, the conference was open for the first time to manufacturers' representatives. Previous references have been closed to all but airline personnel, with manufacturers' men called in only as their products were considered.

More than 200 were registered for the conference, which was the second since 1941. Another similar meeting was held in Chicago in 1944.

Will Be Held Annually—Pre-war conferences were held every six months, but it was decided in Detroit to hold them annually hereafter. Subcommittees will work in the interim on common maintenance problems.

New Committee Set Up

An Air Transport Association engineering committee was established last week with W. C. Menden of United as chairman and Luther Harris, PCA, vice-chairman. They and William Lathrop of American, Don G. Benson, Northwest, and E. L. Anderson of Chicago & Southern will coordinate all executive committee. Each airline will have a representative on the full committee.

Supplants Old Committee—The group supplants the former engineering Aircraft Maintenance Committee, which resented its job of studying post-war plane requirements and has been disbanded.



UAE MAINTENANCE DOCK:

United Air Lines has designed a six-section maintenance dock to accommodate C-47's and the coming DC-6. Of light metal tubing, the dock surrounds the plane and gives access to all parts. Engine door and wing roots are depressible. Other sections are suitable. Photos show a combiner housing the 12 ft. side walling which extends from tail stand to door access stairs, preparatory to moving the tail stand to make way for another plane. One plane can be moved out of the dock and another into it in 20 minutes. United officials say.

Windsor Airport Site Blocked By Jeffries

Detmer Meyer from proposal "individual" and chosen to transfer funds to other projects.

Paving of prospects for an international airport near Windsor, Ont., may have Detroit to select much-criticized Wayne County Airport to municipal needs.

Despite warm endorsement of the Windsor site by airline representatives, Detroit's Mayor Jeffries has described the international airport as "individual" and has signaled intention to transfer the city's \$1,000,000 airport fund to other use.

Opposition Outlined—Mayor Jeffries declared Detroit's interests could best be served by developing Wayne County Airport, pointing out that the city's future growth would be away from the international site and asserting that construction of new highways will bring the county field considerably closer to travel time to all city points.

Further damping chances for selection of the Windsor location was the discovery by Michigan legislators that state and to international projects is unconstitutional.

Hearing Scheduled—Proponents of the Windsor site still are active, however, and a hearing on the location has been scheduled before the Detroit Common Council.

Representatives of the airlines, CAA, Michigan Department of Aeronautics, Detroit Metropolitan Aviation Planning Authority and labor groups are to attend.

Meanwhile other cities have agreed plans to acquire municipal airports or to improve existing ones. Negotiations to take over surplus Army airports have been virtually completed by Chicago and Charlotte, N. C.

Chicago Plans—With the present municipal field becoming increasingly congested Chicago will use the Orchard Place Airport adjacent to the closed Douglas plant of Park Ridge, Cook County, to fill the need for supplemental facilities (AVIATION NEWS, Nov. 8).

Charlotte has added War Assets Corp. for Myers Field, which the Army will vacate except for one hangar and a few small facilities.

Other airport developments include:

Chicago—Municipal officials are pressing plans for eventual establishment of three additional major and six secondary airports to ring

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the Greater Cleveland area. Army engineers have recently approved construction of a dam across airport to be used for skiffs, storage, airplane and amphibious service. The latter project will be part of the city's \$225,000,000 lake front development.

Income from the city's present municipal airport is expected to rise from \$60,400 in 1945 to over \$115,900 in 1946. A possible revision in charges to the four major airlines using the field.

Refunds—Approval of CAA's plan to mail substantial approach and landing devices at Buffalo Airport has been recommended by the city. Airport Advisory Board. CAA would bear the estimated \$75,600 cost of the project which has been strongly favored by American Airlines and PCA.

Denver — City's new \$1,000,000 terminal, on which final plans may be completed during the spring, will be a two-story, hanger-like-shaped structure with closed-in flying the field. First floor will be used for freight, baggage and mail handling; the second floor will contain terminal offices and facilities for handling passengers.

Scrapping—Permanent improvement on Sacramento Municipal Airport, recently returned to the city by the Army, amounted to \$3,900,000 of the \$4,600,000 spent as the field during war years.

Australian Government Orders Four DC-4's, Parts

Douglas Aircraft and the Commonwealth of Australia have agreed a contract for four 44-passenger Douglas DC-4's airplanes and spare parts totaling more than \$2,000,000, the upper limit of the defense policy of the Australian government on the post-war international airline field.

The Australian government is present own a pair of Douglas C-47 Skytrains, purchased from U. S. Army surplus, which have been converted into commercial transports and now are being operated as charter by civil airlines in Australia.

Data Quotes Slack—At the same time the government recently acquired the 36 percent of the stock of Queen Elizabeth Airways formerly owned by British Overseas Airways Corp.—Queen pose is operating from Sydney to Perth in India, connecting with BOAC. Converted Lancasters carrying eight passengers are being used.

Renewed Campaign By Ship Lines To Win Air Privileges Indicated

Sea-Air Committee, new group representing ocean-carriers, issues statement quoting favorable testimony given last year at Senate hearing by Admiral Land.

A renewed campaign by steamship companies to obtain permission to operate overseas services was indicated last week by the issuance of a statement by a new organization which quoted Vice Admiral E. R. Land, president of the Air Transport Association, as directing the benefits of combined sea-air service while he was head of the Maritime Commission.

The Sea-Air Committee, affiliated with the National Federation of American Shipping and representing steamship lines, which has applications before CAA assets it at the responsibility of Congress is recommended by the Civil Aeronautics Board in view of the failure of CAA to find any interpretation of the act that will permit steamship lines to operate airlines.

Testimony Cited—In support of its contention that combined sea-air service would justify a need, the committee quoted Admiral Land's testimony last year before the subcommittee on aviation of the Senate Commerce Committee. Land at that time included interdependence of tickets, joint weather and portage reports, knowledge of trade, exchange and tariff conditions, economies of combined.

The Sea-Air Committee stressed

the experience of steamship firms in operation, pointing out that the Matson line added Pan American Airways in establishing the Pacific service, and that American Export had the first competitive system in the Americas on the Atlantic. Western Steamship Co. is operating air service in Alaska, it was pointed out and the record of W. W. Grace & Co. in the operation of Pan American-Grace Airways also was cited. United Fruit Co. has operated in its Central American operations in the 1920's, the committee's statement recalled.

New Office Handling Canadian Air Statistics

Quantitative statistics of Canadian air services, formerly issued by the Dominion Bureau of Statistics at Ottawa, now will be handled by the Economic Division of the Canadian Air Transport Board in that city.

Figures are given for scheduled and non-scheduled services and for companies which operate both. The source of more than half the revenue determining the classification. The reports cover four scheduled and eight non-scheduled services, operating 75 and 28 aircraft on their respective routes.

Air Express Shipments Soar in 1945

The Railway Express Air Express Division broke domestic and international records last year with 1,185,181 shipments on domestic routes, an increase of 22.36 over the previous year, and 324,881 shipments at international air express, an increase of 30.5 percent over the 248,541 in 1944.

Gross revenues on the domestic air-express traffic passed the 1944 mark by 18.1 percent, with \$75,094,000 reported as compared with \$1,417,710.

Weight Most of Revenue—Air Express traffic consisted mainly of non-perishable machine parts, drugs and printed matter in the earlier part of the year and non-perishable, perishable, appliances and store merchandise in the latter part, weighed about 48,790,180 lbs.

Throughout the course of the year, air-express traffic maintained a better than 24 balance over incoming traffic.

Use of Parachutes On Airlines Discounted

A brief exploring the impracticability of equipping airline passengers and crews with parachutes has been issued by CAA's Safety Bureau, based on an Air Transport Association statement.

The statement of airline and CAA policy in the report was a reply to inquiries from the Connecticut State Industrial Union Council (CIO), relayed to the Board by Connecticut members of Congress. The CAA's better reference to the accident to an Eastern Air Lines plane Jan. 18 over Cheshire, Conn., in which 17 persons were killed, and suggested that Congress should make use of parachutes on airlines compulsory.

John W. Beaulieu—William W. Arnold, ATA engineering and operations vice-president, in a letter to J. C. Ducker, Safety Bureau chief, on which the reply was based, said that the use of the parachute in airline operations during the war had not changed the ATA's view that its use on scheduled airlines is impractical and would not increase the safety of air carrier operations.

Analysis of airline accidents shows that they occur without sufficient warning to permit evacuation of the plane. Of the 161 air carrier accidents in the five years from 1941 through 1945, fatalities occurred in 24 and severe injuries to passengers in 15 cases, leaving 125 in which minor or no injuries resulted.

No Warning—It would seem then in a vast majority of the cases," Arnold stated, "that it was better to 'ride the ship down'—he expressed doubt that in any of the 24 fatal accidents the crew had warning that an accident was imminent.

In contrast to the young military paratrooper and his extensive training, airline passengers vary widely in age and 25 percent are women. Adequate briefing would be impossible, and additional problems would be the actual landing by chute, and survival thereafter if it was made in remote areas.

Safety Held Key—ATA's opinion as expressed by Arnold, is that accident prevention is the key to individual and effective approach to increasing airline safety. As steps in this direction, he cited improved airplane and engine design and performance, greater flight crew com-

U. S. Maps Are Standard

The feasibility of flying in many other countries with American-type aeronautical maps has led to a decision by U. S. Transportation Department Civil Aeronautics Administration to issue World Aeronautical charts on the standard American 1:500,000-scale military aviation chart.

Kenneth Fink, chief of the Aeronautical Charts Section of the Civil Aeronautics Administration and alternate on PCAA's subcommittee on Aeronautical Maps and Charts, says that outside of some necessary changes American flyers should find symbols and color markings with which they are familiar on new international charts of much of the world.

potency, increased efficiency of navigation devices, development of electronic devices and traffic control systems, better weather reporting, development of more powerful engines, improved design and fire-fighting and extinguishing systems.

"We believe that the degree of safety which we shall attain," Arnold told Ducker, "will be as great as our experience of today, and will exceed that of any other form of public transportation."



FRENCH STUDENTS AT TWA SCHOOL

A group of Air France flying engineers get pointers on C-54 outboard wing details at TWA's Indianapolis Division school at Reading, Pa. Inset shows a student in flight instructor's uniform. The instructor is Melissa K. Kirkpatrick. Inset from left, right, standing instructor for TWA. More than 40 Air France crewmen are in training at Reading, and TWA expects to give instructions to another 38 later. Ground school studies take more than a month, after which the students will use a newly-converted C-54 for flight training.

PAA Will Reduce Fares To Honolulu March 15

Both direct and flying time between the West Coast and Honolulu will be cut sharply March 15 when Pan American Airways reduces its Boeing flying boats with Constellation and DC-7's. One-way fares will drop from \$252 to \$195 and round-trip (airfare from \$500 to \$395) while flying time on the 47-passenger Constellation will be 7½ hours against 30 hours or more for the flying boats.

Further expansion of the Hawaii service is scheduled April 15, when flights will be increased from one to two daily. That will provide an annual capacity of 68,000 passengers, well above the 55,000 total which was moved between the mainland and Hawaii by sea and air combined in 1944.

Other New Services—Meanwhile, three domestic carriers have announced new services.

TWA—On March 6 adds two Sunday round-trips daily New York-Chicago and one round-trip daily New York-Chicago-Kansas City with Constellation.

United—On Mar. 1 reactivated service to Iowa City, Ia., on AM 1.

Norfolk—On Mar. 4 tentatively scheduled Sunday New York-Miami non-stop round-trip, today (Mar. 4) adds three round-trips daily New York-Norfolk.



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Young Takes Oath As Member of CAB

Clarence M. Young, newest member of CAB, brings to his work an experience in government relationship with air carriers dating back to the first air commerce regulations. He took the oath as a board member a few days ago, after his appointment by President Truman to NI and the unexpired term of Dr. Edward P. Warren ending next Dec. 31.

Young was 37 when he was called to Washington from Des Moines in 1906 by William F. Macbride and Assistant Secretary of Commerce for Antitrusts. His title soon was changed to director of antitrusts, which he held until 1923 when he succeeded Macbride. He had resigned his tenure as Assistant Secretary of Commerce for Antitrusts in 1903 after a period during which no legislation was established, as important programs began and the making of today's federal antitrust system started.

Young was married and had one son by now, but in those days he seldom saw his family. He had been married since 1897 until 1909 he held posts in

engine No. 2 He received glider pilot's license No. 3 in 1929 He learned to fly in World War 1 and was shot down over the Italian front

He returned to his native town in 1905 and with the late Clyde Herring who subsequently became Governor of Iowa and then senator, established an Aviation Department in Herring's automobile agency. These headwinding days when he made chailar flights and sold more airplanes lasted until 1932 when he began three years as executive secretary of the municipal research bureau at Des Moines.

Served With PAA — The early aviation enthusiast continues sharply with the new board membership more recent jobs in private industry. Pan American Airways exited soon after he had been away from Commerce Department for a year to form and manage a Pacific line, the Hawaiian Pacific Airways. He went to San Francisco in 1954, and in the following years PAA's routes stretched out from the West Coast to Hong Kong and down to New Zealand. The Jewett left the line at Midway and Waka and Canton where World War II ended. His service later rewarded under Harry Truman.

He returned from Palm Springs last Nov. 1 for rumors he doesn't do cocaine, but which are understood to have been policy differences.

F. Holds Reserve Captaincy—Young is a colonel in the Special Air Service Corps. He comes to the island as a California where he once prosecuted the 30-year-old son of Louis Brandeis, and a 19-year-old son of a San Francisco widow. His brother has actual year (this summer). Then the decision will be made whether they will join Young in Washington.

Remember, he says, the two sons, careers, next Dec. 31.

Northwest May Transfer Headquarters From St. Paul

Southwest Airlines, now based at St. Paul, faced with stringent tax laws in Minnesota and urgent need for more space, is considering sites in eight other states along its transcontinental route as locations for its new \$7,500,000 headquarters on which, company officials say, construction will begin by fall.

Despite St. Paul's central location, the city may be rejected in favor of Chicago, Detroit, Milwaukee, Spokane, Billings, Seattle, Newark or New York. Expenditure of over \$1,000,000 for a new hangar at Seattle-Tacoma's New Lake An-

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Nature's harvesters are on full tilt. Hens and dogs, cows and sheep, trees and stars, work in the good harvest earth under bread of wheat and human. They go on producing, under the guiding hand of the farmer and his hand.

Colson has no preexisting problems. He has influenza in the bank, and tries to spend his thoughts of quality but just for lunch and some rest and some happy, but no real relief, some pain, the thing and perhaps food - ... everything!

Ears in normal cases, rural America accounts for nearly 50% of our total cassette sales. It now drops sharply to less than 10% in both all previous records. Granted to prosperity's wheel, with Colours in the hub, your business, too, can be good.

And you can look for the biggest pay-day paydays, the



Colossus,
the Hub of
Prosperity's Wheel

largest investments, to be made on Country Graduate farms . . . the top-half farms . . . the farms which just narrowly take (and take to) Country Graduate.

Factors of Social Influence in the Aviation Industry

Survey shows 80% of personal planes will be sold to residents of rural areas.

In Kansas 452 out of 10,000 farm families agreed to buy planes as against only 196 out of 20,000 city families.

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CAB SCHEDULE

Mar 4 CAB schedule of scheduled airlines to Air-
line Airways and for scheduled airlines to
New York from Feb. 14 (March
1951)
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New York, New York, and New York
Mar 4 Schedule to New American Airways
New York, New York, and New York
Mar 4 Schedule to New American Airways
New York, New York, and New York

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AT GAGE AND SALT LAKE AVENUES, HUNTINGTON PARK, CALIFORNIA
AVIATION NEWS • March 4, 1946

Unprecedented Boom or Bust?

It has not yet dawned on most of us in aviation what a tremendous impetus in civil flying will be brought about by one new law. Ever since the war started we have glibly forecast amazing growth in post-war private flying. The public would take to the air as never before—commercially and for sport.

The pessimists admitted some growth. But they pointed out that despite the millions of air force veterans who would return home, and the number who would still like to fly, there would not be aviation jobs for all of them. And where would they get the money to take lessons in Cuba and buy them?

We were reckoning without the new GI Bill of Rights. This bill answers the pessimists. Every veteran is permitted a free course in education of his own choice.

It would be sheer guesswork to attempt to prophesy how many of these 8,000,000 veterans will choose to use their educational entitlement in aviation training. However, it certainly is not far fetched to envision 1,000,000 veterans seeking some form of aviation courses. Under the terms of the act as recently amended they must begin their education within four years after discharge.

Obviously, this single law presents aviation with an unparalleled opportunity, but a tremendous responsibility as well.

The question of facilities to handle this influx of business in such a short time is a problem. Some of our biggest schools have been operating at near-capacity even before the GI Bill became operative. Present facilities are woefully insufficient. There must be more schools and operators. The Veterans Administration will exercise control over the amount schools may charge veterans for training, but the quality of that training will remain the responsibility of the operators, since it is not necessary that a school be approved by CAA in order to train veterans.

The further realistic question arises as to whether the aviation industry—all segments of it—will be large enough to provide employment for the host of veterans desiring training. The chances are certain that it will not. Undoubtedly, many veterans will learn to fly purely for sport, content to make their bumps in other work.

But thousands of others will take courses primarily to help them win jobs in aviation. If some conventional schools turn down applicants who

fail to meet preliminary entrance examinations, or because the schools feel there will not be jobs open later for them, these youngsters will seek others who will teach them.

Thus will open the way for fly-by-night operations of questionable reputation and capability who will promise their students anything to get business. Such operators will do irreparable harm to aviation if some code of ethics or means of voluntary control is not put forward.

Veterans must have the best of training, if they insist on aviation education, and they must not be hoodwinked into believing they will all win jobs in aviation when they finish. Civil aviation's greatest boom can also become an unprecedented bust.

Danger Signals

Barrage flags are flying on a half-dozen fronts between the Civil Aeronautics Administration and industry. The industry-government honeymoon since the installation of the doughty T. P. Wright as administrator is over. Some accomplishments have been recorded, mainly due to the administrator himself. All praise is accorded CAA for these.

But generally, the keenest words in commercial aviation still express disappointment in the lack of results and the same old attitudes displayed as the CAA working levels since the administration's incorporation. Most of the bureaucratic, red tape-bound civil service clique—interested more in increasing the number of their employees than in work simplification—popped up as even more remunerative jobs, some as assistant administrators.

On matters which reach Mr. Wright's personal attention there is swift and satisfying action which amazes industry. There is no consensus of Mr. Wright except that he does not have a fence. Too many of his lieutenants are shortsighted and mediocre. They do not believe in his very excellent and courageous philosophy of public service and red tape cutting. Worse, they have been known to maintain lies on vital matters.

There has not been enough housecleaning in CAA. Until there is, the organization cannot serve the public or aviation as it should. Public opinion will force the issue eventually. We wish Mr. Wright would force it now.

ROBERT H. WOOD



Radio Equipment by Collins

For their deluxe 48 passenger DC-4 Super B Liners, scheduled to go into service soon after the advertisement appears, Braniff Airways have selected the new Collins 148-1 radio transmitter-receiver.

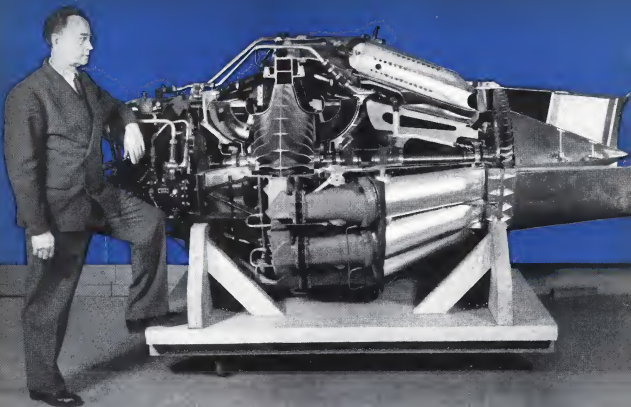
The 148-1 was designed expressly for commercial airlines and executive aircraft. Available 150 ATCR delivers over 100 watts transmitter, receiver and dynamometer power output. The entire weight, including antenna unit, is 80 pounds.

The transmitter develops 100 watts of r-f power on any of 30 optional crystal controlled frequencies within its range of 2,100 to 15,000 mc. Quick, automatic, remote operated frequency selection is provided, with all circuits tuned and ready to operate. The receiver is controlled by a separate group of crystals. The equipment can be set to transmit and receive on any desired combination of frequencies.

Collins is proud to have the continued confidence of this great, progressive airline. Braniff Airways began using Collins equipment in 1935. Today they have a Collins ground station transmitter at every point at which they have a radio station, and a Collins transmitter on every ship in their 18-Ship fleet. Collins Radio Company, Cedar Rapids, Iowa, 11 West 13th Street, New York 10, N. Y.



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"The jet age is here"



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—says R. G. Standerwick, General Electric engineer, as he shows reporters a cutaway of the powerful I-40 engine developed by G.E. for the Lockheed *Shooting Star*. He added, "civilians are certain to benefit from these new power developments in the relatively near future." Mr. Standerwick made these comments after receiving the news of the record-breaking flight by three Army P-80's across the United States in less than five hours.

The non-stop flight of 4 hours, 13 minutes, and 26 seconds made by one of the planes "just cruising," was proof of the tremendous power and efficiency of jet propulsion. However, in com-

mercial planes the combination of gas-turbine propeller drive and a typical jet engine such as the I-40 for additional thrust will probably prove even more efficient. Planes powered in this manner should prove popular with passengers, for there is virtually no vibration. This and other features combined with fuel economy and speed such as cannot be obtained with reciprocating engines will truly mean a new age in commercial aviation.

G-E engineers, continuing development work on jet propulsion, will be glad to discuss it's possibilities with you. *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*

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